

## Application

Monitoring the humidity levels of compressed air supply in CNC-Grinding machines.

## Goal

Ensuring process and product quality by preventing humidity to form water droplets.

## Sector

OEM - Manufacturing

## Customer

CNC-Grinding Machine Manufacturer from Europe



# Constant Dew Point Monitoring Ensures Process Quality and Production Output

Built directly in the CNC-Grinding Machines

## Overview

Modern manufacturing plants rely on automated CNC controlled machine parks. CNC Machine Manufacturers deliver their machines to end customers specifying a certain compressed air quality to be supplied. If the end customer does not supply the specified air quality preventing humidity, it may cause production problems resulting scrap production for the end customer who then contacts the CNC Manufacturer for additional support.

This can make the CNC Manufacturer look bad and cost unnecessary time and money for both the CNC Manufacturer and the end customer.

## Approach

**How SUTO Dew Point Transmitters help a CNC-Grinding Machine Manufacturer to keep their product and process at the highest levels of quality.**

Since not all customers monitor their air quality the CNC Manufacturer contacted SUTO to find a way to monitor the incoming air quality and notify the customer when it is outside the specification.

SUTO worked with them to design in a Dew Point Monitoring System at the compressed air inlet on their CNC grinding machines. The Dew Point Monitoring System constantly measures the humidity levels of the compressed air and has two predetermined alarms set by the CNC manufacturer.

The first warning alarm notifies the machine operator that the air humidity is trending high and the second main alarm shuts down the air inlet and stops the machine when the humidity crosses the max threshold. This prevents any further damage to both the product being manufactured and the CNC machine.

For the Dew Point Monitoring System, the CNC Machine Manufacturer relies on the SUTO S217 OEM Dew Point Transmitter, which constantly measures the dew point, humidity and temperature. Due to its compact size, the S217 OEM is easily integrated into the internal compressed air conditioning system.

The S217 OEM gives both the CNC Manufacturer and the machine operator clear information on the air quality supplied and enables them to ensure that their grinding machines are constantly producing at the highest quality possible.

## Conclusion

Integrating the compact SUTO S217 OEM Dew point Transmitter in the CNC grinding machine allows the customer to constantly monitor the dew point, humidity and temperature of the compressed air supply. This provides a simple and cost-effective system that ensures process quality and production output at the highest standards.

## Product in use



**S217 OEM Dew Point Transmitter**  
-20 ... +50 °C Td

The S217 OEM Dew Point Transmitter provides stable and reliable long-term dew point monitoring down to -60 °C Td.



Be smart. Measure it.